work with the Air University Integrated Program Review process resulted in significant increases in Individual Mobilization Augmentee positions to meet critical Air University mission needs. As a direct result, Air Reserve forces made significant and long-lasting contributions to successful Air University mission operations. From determining the effective and efficient use of Reserve Force personnel in war and during peacetime, to redefining roles, missions, force structure, training, morale, finance, recruiting, and retention, Major General Ballard always led from the front.

We wish to extend congratulations to Major General Ballard on the occasion of his retirement. We are honored to recognize his many accomplishments and ask that our colleagues in the United States House of Representatives join in recognizing his very worthy achievements.

NUCLEAR EARTH PENETRATOR WEAPONS: THE MYTH AND DANGER

Mr. AKAKA. Madam President, I rise today to discuss the myth and dangers posed by the nuclear earth penetrating weapons proposed by the Bush administration.

The administration suggests that new nuclear weapons could be needed to destroy a growing number of hard and deeply buried targets, HDBT. The Intelligence Community has estimated that there are over 10,000 potential HDBTs worldwide. Many of these are near the surface, serve tactical roles, and can be attacked with conventional weapons. But some hundreds of these targets have stronger concrete reenforcement, or are buried at great depths, or are in tunnels. They play a strategic role, protecting senior leaders, command and control centers, or stored weapons of mass destruction. Of particular concern are the very hardened or deeply buried HDBTs located in so-called rogue nations

To attack the most deeply buried structures, the administration would like to have a nuclear weapon that could destroy a bunker some 300 meters, or about 1,000 feet, underground without causing substantial ''collateral damage.'' The administration is proposing to explore two new nuclear weapons for attacking this category of targets. The first is the so-called Robust Nuclear Earth Penetrator, or RNEP for short. The second is a new class of low-yield nuclear warheads.

These two initiatives are often confused in the press or thought to be different versions of a mini-nuke bunker-busting nuclear weapon. The two candidates being considered by the administration for modification into a RNEP, the B61 and B83 bombs, have been in the U.S. arsenal for a number of years. They are not, however, low-yield weapons. In fact, they have yields in the tens of kilotons to megaton range.

Due to congressional concerns, the fiscal year 2003 Defense authorization bill required the Department of Defense to deliver to the Armed Services Committees of both Chambers a report on the need for an RNEP before funds could be spent on the program. On March 19, 2003, the administration delivered the report. After a 30-day waiting period, the administration has said it will begin to study whether the B61 or B83 bombs can be modified into a RNEP. The administration plans to spend some $15 million on this work in fiscal year 2004, and the study could cost as much as $46 million.

As for low-yield nuclear weapons, these are nuclear weapons with an explosive yield of less than 5 kilotons. Ten years ago, Congress placed a prohibition on ''research and development'' that could lead to the production of a new low-yield nuclear weapon in the fiscal year 1994 Defense Authorization Act. In the early 1990s, advocates of low-yield weapons claimed that precision strikes with such weapons could be used to attack weapons of mass destruction in third-world states that had acquired them. Congress was concerned that the development of such weapons would send the wrong message about the U.S. commitment to nonproliferation. In addition, there were fears that if such weapons were developed, the firewall between nuclear and conventional weapons would be removed.

The administration now seeks to remove the prohibition on research on low-yield weapons research. The administration's Nuclear Posture Review calls for exploring new nuclear weapons ''concepts'' to be able to attack HDBTs with reduced collateral damage. According to the administration, the congressional restriction on research on low-yield nuclear weapons ''impedes this effort.''

Ignoring the policy implications of making a nuclear weapon an acceptable tool to be used like a conventional weapon, there is still the critical question of whether such a weapon could destroy a deeply buried target without massive collateral damage. Could a weapon burrow so deep that its nuclear explosion could be safely contained within the Earth? The short answer to this question is no.

To be a bunker buster, the weapon design must protect the warhead and associated electronics while it tunnels into the ground. This severely limits the missile to smaller impact velocities, which, in turn, severely limits how far down it can go. In fact, limits on material strengths make 50 feet about the maximum depth to which a missile could penetrate into dry rocky soil while maintaining its integrity until the warhead detonates.

The radioactive fallout from a nuclear weapon detonated at a maximum depth of 50 feet could not be contained. Even a low-yield nuclear weapon of 0.1 kiloton, according to Princeton physicist Robert Nelson, must penetrate about 230 feet underground for the explosion to be fully contained. Based on the experience of U.S. underground tests at the Nevada Test Site, a 5-kiloton explosive has to be buried at least 650 feet to be fully contained. A 100-kiloton explosive must be at least 1,300 feet deep.

To comprehend what would happen if a nuclear bunker-busting weapon were used, consider the damage that would result from the use of a ''low-yield'' 1-kiloton warhead. Such a weapon would be one-thirteenth the size of the atomic bomb dropped over Hiroshima, and of a size that may be pursued if the congressional prohibition on research on low-yield weapons is removed. At the maximum depth possible of 20 to 50 feet, a 1-kiloton warhead would eject more than 1 million cubic feet of radioactive debris from a crater bigger than a football field. If such low-yield weapon were used to attack a HDBT in or near a city, it could devastate the area. There would be major collateral damage because the ejected radioactive debris would create a lethal gamma-radiation field over a large area.

For the shock of a nuclear explosion to reach a hardened target at 1,000 feet, a much larger warhead would be required, like the B61 and B83 bombs being considered for the RNEP. But the B61 and B83 bombs would dig a much larger crater and create a substantially larger amount of radioactive debris, causing that much more radioactive fallout and devastation.

I also am concerned about the logistical problems of using nuclear weapons in a combat setting. Destroying bunkers requires knowing exactly where they are and delivering a weapon with precision and accuracy. During Operation Enduring Freedom, American Special Forces were used as spotters on the ground near the targets to provide the intelligence necessary to strike suspected al-Qaida command bunkers and weapon depots. Our Special Forces would be in great danger if on-the-ground spotting were required for nuclear bunker busters.

As we have seen in our efforts to target Saddam Hussein, his bunker complexes are often located inside Baghdad. Leaders of other ''rogue states'' can be expected to construct their command and control centers inside their capital cities too. The potential for collateral damage to our troops and the public our forces are liberating are obvious.

Another consideration is battlefield assessment. Some bomb damage assessment can be done from the air, but if a closer look is needed, how soon could troops be sent in to determine if the strike was successful? The answer depends on the importance we place on the safety and health of our forces. If we use the underground Nevada Test Site as one real-world example, it will be a very long time. If battle planners need assessment more quickly, or we need to recover evidence of what was contained in a bunker, then American soldiers and marines will be put at risk.

This is not a theoretical consideration. We are discussing DNA testing of bodies found in Iraq to determine if they are in fact Saddam Hussein, his sons, or his closest associates. Had the administration used a nuclear weapon to destroy Saddam Hussein's command bunker, this task would be infinitely more difficult, and more dangerous.

I appreciate the challenge that deeply hardened bunkers pose. I am not convinced that RNEP or low-yield nuclear weapons are the answer. Indeed, the Pentagon already has a number of conventional weapons capable of destroying hardened targets buried at 50 feet, or putting them out of action by blocking entrances and exits. Moreover, ADM James Ellis, Commander-in-Chief of U.S. STRATCOM, recently told Congress that he plans to emphasize conventional options in STRATCOM's new global strike mission in order to reduce U.S. reliance on nuclear weapons. Research and development have improved the precision, penetrating capability, and explosive power of conventional weapons dramatically over the last decade. Further research and development on conventional weapons to attack buried and hardened targets are underway.

Sometimes, the simplest solution is the correct one. We do not need a nuclear weapon to destroy a tunnel entrance or a mineshaft. The same research in material science and precision guidance that will allow a missile to aim and protect the warhead to penetrate farther should be applied to conventional bunker busters. Conventional bunker busters could meet the challenge of threatening the several hundred most hardened and deep targets in question. Conventional bunker busters would not place civilian populations or our forces at undue risk and harm, and would keep the barrier between nuclear and conventional weapons high and wide.

Finally, we must keep in mind the serious international implications of the administration's pursuit of new nuclear weapons designs. Russian nuclear weapons designers have advocated new generations of more usable nuclear weapons. If the United States starts down this path, Russia will be encouraged to do the same. If Russia begins, maybe China will too. A new arms race in supposedly low-yield and ''usable'' nuclear weapons will result. If NATO forces move farther east, Russia may deploy such weapons opposite NATO forces. China may view them as usable in crisis with Taiwan. We should stop this new tactical nuclear arms race before it starts. We should not develop the RNEP. We should keep the prohibition on research on the low-yield nuclear weapons.

JIM CLAYTON

Mr. ALEXANDER. Madam President, I rise today to pay tribute to an outstanding Tennessean, James L. Clayton, better known as Jim.

Jim Clayton is the son of a sharecropper and was raised in West Tennessee. This impressive Tennessean has lived the American dream of Horatio Alger. From his most humble beginnings, he has gone on to become one of the wealthiest men in the United States. Mr. Clayton is the entrepreneur behind Clayton Homes, Inc., a $1.2 billion manufactured-housing company, which is one of Tennessee's great economic treasures.

Last week, Warren Buffett, the widely respected head of Berkshire Hathaway, recognized what we in Tennessee have long known about the quality of Clayton Homes by offering $1.7 billion for the purchase of Clayton Homes' manufactured-home empire.

Mr. Clayton has served as chairman of the board of Clayton Homes, Inc., since he founded the original Clayton auto sales companies in 1956. In 1966, he expanded and branched out into manufactured housing and sold his automobile dealerships in 1981. The Clayton Homes corporate headquarters is located in the county of my hometown, Blount County, TN. Clayton Homes employs 2,500 Tennesseans who work in its sales centers and factories in excellent jobs. Thousands more Tennesseans are employed in good jobs as a result, direct and indirect, of Clayton Homes. And I am pleased to say that as a result of the negotiations, Berkshire Hathaway has agreed to leave Clayton Homes and its employees in Tennessee.

I want to say a few words about Jim Clayton, who is a good and long-time friend. Mr. Clayton received his college degree from the University of Tennessee in 1957 and his law degree from the University Of Tennessee College Of Law in 1964. He has received several honorary doctoral degrees and numerous business awards, including many Wall Street Transcript Gold Awards, Silver Awards, and a Bronze Award as the top chief executive in the manufactured-housing industry. Forbes, the business magazine, has named Clayton Homes, Inc., one of its 200 Best-Managed Companies at least nine times. Clayton Homes has received the Platinum Award for being one of the top companies in the United States. Just this year, Worth magazine recognized Jim Clayton as one of Tennessee's wealthiest residents. Mr. Clayton's amazing story from sharecroppers' son to America's business elite can be found in his fascinating autobiography, First a Dream.

Mr. President, not only is Jim Clayton outstanding in the business arena, he is also an outstanding member of the Knoxville, TN community. He has made generous contributions to many charitable causes, including $3.25 million for construction of the Knoxville Museum of Art; $1 million for the University of Tennessee College of Law for its Center for Entrepreneurial Law; $1 million to start the Clayton Birthing Center at Baptist Hospital; and many grants to K–12 educational programs, most of which were given anonymously.

Mr. Clayton also generously donates his time to various committees and community organizations that work to improve Knoxville and its surrounding communities.

I know Mr. Clayton and count him as a friend. Despite his great wealth and success, I know him to be a warm and humble person. But my colleagues need not take the word of one of Mr. Clayton's friends. Many other Tennesseans have told me over many years of how helpful, kind, and approachable Mr. Clayton is, what a perfect gentleman he is. Mr. President, compliments do not get much better than that.

Mr. President, this brief statement cannot capture all the strengths of Jim Clayton and his manifold good works for his employees, his customers, his community, and his State. I did want to bring to my colleagues' attention the accomplishments and legacy of Jim Clayton, and I am honored to recognize his contributions to Tennessee and America as a whole.

NATURALIZATION AND FAMILY PROTECTION FOR MILITARY MEMBERS ACT OF 2003

Mr. BROWNBACK. Mr. President, I am pleased to rise today to add another voice of support for the Naturalization and Family Protection for Military Members Act of 2003.

Earlier today, the President visited Bethesda Naval Hospital with his wife Laura and spent time with some of the courageous men and women who have been wounded while fighting both to secure the safety and freedom of all Americans, as well as on behalf of a people starving for access to our ideals of liberty and justice for all. After this visit, he was visibly moved by the bravery and patriotism he witnessed, and he noted a special moment for him. I'd like to quote his comments from the press conference now:

''I think the thing that stood out the most to me was seeing two wounded soldiers swear in as citizens of the United States. One man from Mexico, one man from the Philippines. People who had gone overseas. People who had risked their lives for peace and security and freedom. They wore the uniform of the United States military. And Laura and I got to see them sworn in as citizens. It was a very profound moment. We were both honored to have witnesses this.

''You know, we got an amazing country where so powerful, the values we believe, that people would be willing to risk their own life and become a citizen after being wounded. It's an amazing moment. Really proud of it.''

The President's words speak to exactly why this legislation is so important—and so worthwhile. These men and women are willing to risk their own lives on our behalf, even though they are not yet citizens of this country. It is why I once again strongly encourage the Senate to lend its support to this bill.